

ABSTRACT OF THE DISCLOSURE

Systems and methods for ascertaining resource requirements print jobs. There
5 are at least two significant features of the invention. A first feature results from a
provision of a system and method for segmenting the document to provide a sample
window. A RIP (Raster Image Processing) analysis is performed with respect to the
sample to determine a ratio of laser on and laser off times for same. On the basis of
the RIP analysis with respect to the sample data, the requirements of the entire
10 document are estimated. The resource requirements of the entire job are then
estimated, page by page, in a similar manner and compared to a resource (e.g. toner)
availability data provided by the printer. If adequate resources are available, the job is
printed. If adequate resources are not available, a message is provided to the user or,
the printer is automatically supplied with additional resources. The second feature
15 results from a provision of a system and method for performing a RIP analysis of the
entire document (or job) at a first low level of resolution (e.g. 50 dots per inch) and
comparing the result to printer resource data. If adequate resources are available, the
job is printed. Actual resource consumption data is then used to improve on future
estimates. If adequate resources are not available, a message is provided to the user
20 or the printer is automatically supplied with additional resources. The method
embodied in each system is less computationally intensive and substantially faster
than the conventional technique. In addition, the methods may be used in combination
for further improvements in speed and further reductions in computational intensity.